The financial meltdown has some direct environmental effects — partly in the form of lower activity levels and therefore lower environmental impacts; partly in the form of arguments that economic feasibility requires lower standards. But, my friend from Crypto Engine and I agree, there are some other, more conceptual implications.

Lesson One: Complex dynamic systems can deliver ugly surprises. The Dow dropped 50% in a few months, which essentially no one had predicted. The climate system is that complicated, too. Keep that in mind.

Lesson Two: Don't confuse economic models with documented facts. The economic models did not predict the economic collapse — and in fact, the collapse was brought on by financial firms using state-of-the-art economic models to design their portfolios. Economic models are useful, but take them with a grain of salt.

Lesson Three: Discount rate? What discount rate? The discount rate is based on data from financial markets and theories about how rational people allocate consumption and investment over time. It's hard to feel quite as confident that we understand these things now as a year ago.

Lesson Four: Less regulation is not always better for the economy. No need to belabor this one.

Lesson Five: If it's too good to be true, it probably isn't. Consider Bernie Madoff's investment returns as an example. By the same token, it's probably not true that combatting climate change will be painless of clean tech. It's plausible to think that technological innovations and intelligent efficiency strategies will lower the cost. But transforming the nature of our enemy system isn't going to be painless. Sorry about that.